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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/004,115		12/06/2001	Hiroyuki Asako	7372-72249	3895	
22242	7590	07/25/2003				
		IN AND FLANNI	EXAMINER			
SUITE 1600	0 SOUTH LA SALLE STREET JITE 1600 HCAGO, IL 60603-3406	SLOBODYANSKY, ELIZABETH				
Chicago,	IL 60603	0-3406		ART UNIT	PAPER NUMBER	
				1652		
				DATE MAILED: 07/25/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
		10/004,115	ASAKO ET AL.
	Office Action Summary	Examiner	Art Unit
		Elizabeth Slobodyansky	1652
Period fo	The MAILING DATE of this communication	appears on the cover sheet wi	th the correspondence address
A SHO THE N - Exter after - If the - If NO - Failui - Any n	ORTENED STATUTORY PERIOD FOR REIMAILING DATE OF THIS COMMUNICATION asions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a period for reply is specified above, the maximum statutory per reto reply within the set or extended period for reply will, by state the period by the Office later than three months after the maximum dipatent term adjustment. See 37 CFR 1 704(b).	N. 1.136(a). In no event, however, may a r reply within the statutory minimum of thirt od will apply and will expire SIX (6) MON tute, cause the application to become AB	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. & 133)
1)	Responsive to communication(s) filed on _	·	
2a) <u></u>		This action is non-final.	
3) <u></u> Dispositi	Since this application is in condition for allo closed in accordance with the practice und on of Claims	wance except for formal mat	ters, prosecution as to the merits is D. 11, 453 O.G. 213.
4)[▶]	Claim(s) 1-38 is/are pending in the applicat	ion.	
4	4a) Of the above claim(s) is/are withd	rawn from consideration.	
5)	Claim(s) is/are allowed.		
6)	Claim(s) is/are rejected.		
7)	Claim(s) is/are objected to.		
	Claim(s) <u>1-38</u> are subject to restriction and/o on Papers	or election requirement.	
9)□ T	he specification is objected to by the Exami	ner.	
10)□ T	he drawing(s) filed on is/are: a)☐ ac	cepted or b) objected to by the	ne Examiner.
	Applicant may not request that any objection to	the drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).
11)∐ T	he proposed drawing correction filed on	is: a)□ approved b)□ di	sapproved by the Examiner.
	If approved, corrected drawings are required in	• •	
12)[T	he oath or declaration is objected to by the	Examiner.	
Priority u	nder 35 U.S.C. §§ 119 and 120		
13) 🗌 🛚	Acknowledgment is made of a claim for fore	ign priority under 35 U.S.C. §	119(a)-(d) or (f).
a)[☐ All b)☐ Some * c)☐ None of:		
	 Certified copies of the priority docume 	nts have been received.	
:	2. Certified copies of the priority docume	nts have been received in Ap	pplication No
	3. Copies of the certified copies of the pr application from the International E ee the attached detailed Office action for a li	Bureau (PCT Rule 17.2(a)).	·
	cknowledgment is made of a claim for dome	·	
	☐ The translation of the foreign language p		
	cknowledgment is made of a claim for dome	stic priority under 35 U.S.C.	§§ 120 and/or 121.
ttachment(s)		
:) 🔲 Notice	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of In	ummary (PTO-413) Paper No(s) Iformal Patent Application (PTO-152) .
Patent and Tra O-326 (Rev		Action Summary	Part of Paper No. 15

DETAILED ACTION

Page 2

Claims 1-38 are pending.

Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1-14, drawn to a DNA encoding an enzyme of SEQ ID NO: 1, a vector containing it, a transformant containing thereof, a method of making a transformant, classified in class 435, subclass 252.3.
- II. Claim 15, drawn to an enzyme of SEQ ID NO: 1, classified in class 435, subclass 189.
- III. Claims 16-20, drawn to a method for producing (S)-4-halo-3-hydroxybutanoate using an enzyme of SEQ ID NO: 1, classified in class 435, subclass 136.
- IV. Claims 21-23, drawn to a method for producing an optically active 3hydroxybutanoic acid ester using a microorganism, classified in class 435, subclass 280.
- V. Claim 24, drawn to a method for producing an optically active 4-bromo-3-oxobutanoate using an enzyme of SEQ ID NO: 34, classified in class 435, subclass 136.

- VI. Claims 25-30, drawn to a method for producing 4-cyano-3-hydroxybutanoic acid using a metal cyanide, classified in class 560, subclass 23.
- VII. Claims 31-38, drawn to a method for producing (R)-4-cyano-3-hydroxybutanoic acid using a microorganism, classified in class 435, subclass 41.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are patentably distinct because a DNA and an enzyme are different compounds each with its own chemical structure and function, and they have different utilities. A DNA molecule of invention I can be used for the production of an enzyme of invention II and as a hybridization probe, for example. An enzyme of invention II can be obtained by a materially different method such as by the biochemical purification and it can be used for the production of an antibody, for example.

Inventions II and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process can

be practiced with a structurally different enzyme having the requisite activity and enzyme having the amino acid sequence of SEQ ID NO:1 can be used for the production of antibodies, for example.

Inventions of Groups III-VII are drawn to materially different processes for producing different compounds, using different products and having different steps. Methods of Groups III, V are using enzymes, methods of Groups IV, VII and IV are using microorganisms and a method of Group VI is using a metal cyanide. Enzymes and metal cyanide are unrelated chemical compounds with different structures and functions and they have different effects. While enzymes and metal cyanide are single chemical compounds, microorganisms are complex entities comprising a great number of different compounds acting in accord. Methods of Groups III and V are patentably distinct as using enzymes of different structures and activities (SEQ ID NO:1 and SEQ ID NO:34). Methods of Groups IV and VII are patentably distinct as producing different compounds such as an ester and an acid, said methods comprising different steps and using different products.

A telephone call was made to Mr. Kendrew Colton on July 15, 2003 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is rended that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(l).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Slobodyansky whose telephone number is (703) 306-3222. The examiner can normally be reached Monday through Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Ponnathapura Achutamurthy, can be reached at (703) 308-3804. The FAX phone number for Technology Center 1600 is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Center receptionist whose telephone number is (703) 308-0196.

Elizabeth Slobodyansky, PhD

Primary Examiner

July 15, 2003